Spireslack Locality 17: Devonian strata

NGR: [276090 630849] [NS 76090 30849]

Key category of interest		Rarity	Quality
1. Stratigraphy	5		2
2. Sedimentary rocks	3		3
3. Quaternary deposits	4		4

Access: The face is difficult to access due to a deep pond — access possible elsewhere over very uneven ground. Current safety: Little evidence for recent rock fall in exposed face, but uneven surfaces and waterlogged conditions underfoot.

Measures to enhance site: Create bridge over pond and even out surfaces to allow easier access. Create viewing platform in front of pond.

Key categories in order of interest (1 = primary interest); Rarity, 5 = only example in Spireslack, 1 = many examples in Spireslack; Quality 5 = exceptional preservation in Spireslack, easy access/viewing potential 1 = average preservation in Spireslack, difficult access/viewing potential

Photograph overview with polygon boundary

Aerial (Overview of Locality 17). Site boundary includes key rock exposures, immediate access to site and viewpoints to the site.

Site description

Geology

The merit of this site is in its context: a major fault has displaced the Carboniferous strata against Devonian strata at the far eastern margin of the site, providing a natural cut off for mining operations. Following the Devonian era, which was dominated by fluvial and clastic systems, the Carboniferous saw more swamp-like environments developing, causing the formation of vast amounts of coal. The purpose of this locality in the geodiversity audit is to provide a sense of scale for the site and to illustrate the importance of the Carboniferous strategically within

Scotland compared to rocks of other geological periods. The Devonian strata, the Swanshaw Formation at this locality, are composed of massive red-brown medium and coarse-grained terrestrial sandstones with subordinate pebble beds. Peat overlying till is visible above the rock face, although not as accessible in the Quaternary deposits described in locality 16.

Access and enhancement suggestions

Access is impeded by a pond but an appreciation of the massive sandstone can be given without crossing the pond. Levelling of the ground to provide access to the face and providing a crossing over the pond would enable hands on access to the older strata.

Site photographs

(Spireslack_17 P1): Exposure of the Swanshaw Sandstone Formation, at the eastern edge of the Spireslack SCM. © BGS. NERC.

(Spireslack_17 P2): Peat overlying bleached till (formation of podzol) above the Swanshaw Sandstone Formation. © BGS, NERC.

References



(Overview of Locality 17). Site boundary includes key rock exposures, immediate access to site and viewpoints to the site.



(Spireslack_17 P1) Exposure of the Swanshaw Sandstone Formation, at the eastern edge of the Spireslack SCM. © BGS, NERC.



(Spireslack_17 P2) Peat overlying bleached till (formation of podzol) above the Swanshaw Sandstone